

Mineral Industry Surveys

For information, contact:

James F. Carlin, Jr., Tin Commodity Specialist
U.S. Geological Survey
989 National Center
Reston, VA 20192
Telephone: (703) 648-4985, Fax: (703) 648-7757
E-mail: jcarlin@usgs.gov

Elsie D. Isaac (Data)
Telephone: (703) 648-7950
Fax: (703) 648-7975
E-mail: eisaac@usgs.gov

Internet: <http://minerals.usgs.gov/minerals>

TIN IN DECEMBER 2005

Domestic consumption of primary tin in December was estimated to be about 1% higher than that in November 2005 and virtually the same as that in December 2004, according to the U.S. Geological Survey. Estimated domestic consumption of primary tin during 2005 was about 3% below that estimated for 2004. The leading tin exporters to the United States in the first 11 months of 2005 were, in descending order: Peru, Bolivia, Indonesia, China, Brazil and Malaysia.

The Platts Metals Week average composite price for tin in December 2005 was \$4.43 per pound, about 7% higher than that in November and 20% less than that in December 2004. Mittal Steel USA Inc. (Chicago, IL), announced plans to close permanently the galvanizing line at its Weirton, WV, steel plant and to focus only on tinplate products at its Weirton facility. Mittal operates other steel plants in the United States, some of which make tinplate. The move came 2 months after the company sent notices to workers that the plant's blast furnace, idled for much of 2005, would be shuttered permanently. The blast furnace closure ends almost 100 years of steelmaking at the Weirton plant, which was founded as Weirton Steel Corp. in 1909. In 1984, its employees bought the plant, at the time making it the world's largest wholly employee-owned company in terms of tonnage produced. In 2003, International Steel Group Inc. (ISG) purchased Weirton, and Mittal bought ISG in April 2005. The Weirton facility has long ranked as a leading domestic tin user (American Metal Market, 2006b).

Mittal Steel Co. NV (Rotterdam, The Netherlands), owner of Mittal Steel USA and the world's largest steel producer, offered \$22 billion to acquire Arcelor SA (Luxembourg), the world's second largest steelmaker, both ranked in terms of tonnage produced. The merger would create an entity with an annual production capacity of about 127 million metric tons (Mt) of steel, about 11% of world crude steel capacity. Mittal's capacity is estimated to be about 70 Mt while Arcelor's is estimated to be 57 Mt. Both firms are major tinplate producers (American Metal Market, 2006a).

Bache Financial Ltd. reported that it expected the Western World tin market to be relatively balanced in 2006 before moving into a surplus in 2007. Bache pointed out that developments in China have been critical for the tin market. The

tin price rise since 2002 can be attributed largely to the sharp decrease in Chinese output and subsequent significant increases in consumption in China. Until recently, China produced considerably more tin than it consumed domestically and was a significant exporter of tin metal to the West. In 2000, China produced about 112,000 t of refined tin and consumed about 50,000 t. China was a net importer of tin in the first 11 months of 2005. Nevertheless, the global market moved into surplus in 2005. Bache attributed the market's oversupply to much higher production from small operations in Indonesia. The firm forecast Western World tin production to rise to 215,000 t in 2006 from 196,000 t in 2005, while demand is expected to rise to 232,000 t from 225,000 t in 2005—which was still well below 2004's level of 240,000 t. Bache estimated tin demand in China at 90,000 t in 2005 (Platts Metals Week, 2006b).

In Bolivia, the state mining organization Corporation Minera de Bolivia announced the reactivation of two metallurgical plants. One of the two plants was the La Palca tin facility. Built during the 1980s with aid from the Soviet Union, La Palca never operated satisfactorily owing to a lack of suitable ores (Platts Metals Week, 2006a).

In Alaska, Solomon Resources Ltd. and Brett Resources Ltd. signed a letter of intent to grant Brett an option on Solomon's 100% owned Sleitat Mountain tin-silver-tungsten deposit, located in the Taylor Mountains Quadrangle, southwest Alaska. The Sleitat Mountain Project covers 3,520 acres (1,425 hectares), located about 135 kilometers northeast of the coastal town of Dillingham. The deposit outcrops in a saddle on Sleitat Mountain, where tin, tungsten, and silver mineralization occur in an east-west-trending, steeply dipping zone that extends at least 975 meters along the trend (TIN World, 2006).

Update

On February 3, 2006, the Platts Metals Week composite price for tin was \$5.11 per pound.

References Cited

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Arcelor: American Metal Market, v. 114, no. 4-1, January 30, p. 1, 2.

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Platts Metals Week, 2006b, Western tin market relatively well balanced in
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TABLE 1
SALIENT TIN STATISTICS¹

(Metric tons, unless otherwise noted)

	2005			
	2004 ^P	November	December	January-December
Production, secondary ^{e,2}	10,800	900	900	10,800
Consumption:				
Primary	38,500	3,070 ^r	3,100	37,400
Secondary	8,200	779	777	9,230
Imports for consumption, metal	47,600	3,130	NA	NA
Exports, metal	3,650	342	NA	NA
Stocks at end of period	6,140	5,410 ^r	5,700	XX
Prices (average cents per pound): ³				
Metals Week composite ⁴	547.30	414.32	443.03	XX
Metals Week New York dealer	409.38	305.00	329.69	XX
London, standard grade, cash	385.00	279.00	304.00	XX
Kuala Lumpur	385.11	280.64	301.83	XX

^eEstimated. ^PPreliminary. ^rRevised. NA Not available. XX Not applicable.

¹Data are rounded to no more than three significant digits, except prices.

²Includes tin recovered from alloys and tinplate. The detinning of tinplate (coated steel) yields only a small part of the total.

³Source: Platts Metals Week.

⁴The Metals Week composite price is a calculated formula, not a market price, that includes fixed and finance charges and a risk factor. It is normally substantially higher than other tin prices.

TABLE 2
METALS WEEK COMPOSITE PRICE¹

(Cents per pound)

Period	High	Low	Average
2004:			
December	569.06	505.64	555.57
Year	624.98	424.94	547.30
2005:			
January	521.70	492.15	503.78
February	544.11	511.92	523.08
March	555.16	521.08	543.81
April	534.61	521.86	527.02
May	529.88	521.36	524.53
June	514.23	476.28	497.35
July	483.46	462.98	470.82
August	482.15	458.34	469.43
September	465.96	433.15	449.50
October	441.09	414.42	429.86
November	423.21	405.80	414.32
December	457.37	418.38	443.03

¹The Metals Week composite price is a calculated formula, not a market price, that includes fixed and finance charges and a risk factor. It is normally substantially higher than other tin prices.

Source: Platts Metals Week.

TABLE 3
TINPLATE PRODUCTION AND SHIPMENTS IN THE UNITED STATES¹

(Metric tons, unless otherwise noted)

Period	Tinplate waste (waste, strips, cobble, etc.) (gross weight)	Tinplate (all forms)			Shipments ²
		Gross weight	Tin content	Tin per metric ton of plate (kilograms)	
2004 ^P	W	2,550,000	7,700	3.0	2,190,000
2005:					
January	W	207,000	676	3.3	144,000
February	W	202,000	684	3.4	164,000
March	W	209,000	684	3.3	166,000
April	W	199,000	662	3.3	136,000
May	W	174,000	595	3.4	186,000
June	W	186,000	706	3.8	169,000
July	W	168,000	612	3.8	136,000
August	W	166,000	606	3.7	167,000
September	W	171,000	615	3.6	150,000
October	W	197,000 ^r	614 ^r	3.1 ^r	150,000
November	W	198,000 ^r	626 ^r	3.2 ^r	144,000
December	W	200,000	589	3.0	NA

^PPreliminary. ^rRevised. NA Not available. W Withheld to avoid disclosing company proprietary data.

¹Data are rounded to no more than three significant digits.

²Source: American Iron and Steel Institute monthly publication.

TABLE 4
U.S. TIN IMPORTS FOR CONSUMPTION AND EXPORTS¹

(Metric tons)

Country or product	2005			
	2004	October	November	January- November
Imports:				
Metal (unwrought tin):				
Bolivia	5,060	170	20	5,400
Brazil	4,330	75	123	2,020
Chile	281	--	--	20
China	5,310	207	288	3,990
Indonesia	4,660	1,040	832	4,750
Japan	540	--	--	--
Malaysia	6,600	80	150	1,430
Peru	19,600	1,230	1,610	17,800
Switzerland	178	--	--	--
Thailand	500	--	--	45
United Kingdom	97	--	2	47
Other	472	--	101	262
Total	47,600	2,810	3,130	35,700
Other (gross weight):				
Alloys	5,180	469	342	6,940
Bars and rods	625	99	102	964
Foil, tubes, pipes	6	(2)	(2)	8
Plates, sheets, strip	509	36	28	318
Waste and scrap	1,950	52	212	2,850
Miscellaneous	3,330	268	267	3,070
Total	11,600	924	951	14,200
Exports (metal)	3,650	397	342	4,020

-- Zero.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Less than 1/2 unit.

Source: U.S. Census Bureau.

TABLE 5
CONSUMPTION OF TIN IN THE UNITED STATES, BY FINISHED PRODUCT¹

(Metric tons of contained tin)

Product	2005							
	2004 ^P	November			December			January- December
		Primary	Secondary	Total	Primary	Secondary	Total	
Alloys (miscellaneous) ²	2,800	101	--	101	96	--	96	1,240
Babbitt	264	19	W	19	20	W	20	276
Bar tin and anodes	182	23	W	23	23	W	23	275
Bronze and brass	2,490	177	143	320	176	143	319	3,700
Chemicals	8,490	719	W	719	773	W	773	8,680
Collapsible tubes and foil	W	W	W	W	W	W	W	W
Solder	12,500	661	325	986	677	325	1,000	12,200
Tinning	451	61	--	61	66	--	66	740
Tinplate ³	7,700	626 ^r	--	626 ^r	589	--	589	7,670
Tin powder	W	W	--	W	W	--	W	W
White metal ⁴	W	W	--	W	W	--	W	W
Other	1,000	80 ^r	11	91 ^r	80	9	89	1,070
Total reported	35,900	2,470 ^r	479	2,950 ^r	2,500	477	2,980	35,900
Estimated undistributed consumption ⁵	10,800	600	300	900	600	300	900	10,800
Grand total	46,700	3,070 ^r	779	3,850 ^r	3,100	777	3,880	46,700

^PPreliminary. ^rRevised. W Withheld to avoid disclosing company proprietary data; included with "Other." -- Zero.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Includes terne metal.

³Includes secondary pig tin and tin components of tinplating chemical solutions.

⁴Includes pewter, britannia metal, and jewelers' metal.

⁵Estimated consumption of plants reporting on an annual basis.